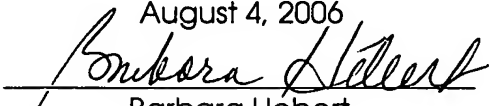




Patent Docket P5201R1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of Stephen J. Anderson, et al. Serial No.: 10/583,466 Filed: June 15, 2006 For: Novel gene disruptions, compositions and methods relating thereto	Group Art Unit: Not Assigned Examiner: Not Assigned Confirmation No: 3697 CUSTOMER NO: 09157 CERTIFICATE OF MAILING I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on August 4, 2006  Barbara Hebert
---	--

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicants submit herewith patents, publications or other information (attached hereto and listed on the attached revised Form PTO-1449) of which they are aware, which they believe may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR §1.56.

This Information Disclosure Statement is filed in accordance with the provisions of:

(X) **37 CFR §1.97(b)**

- within three months of the filing date of the application other than a continued prosecution application under 37 CFR §1.53(d); **or**
- within three months of the date of entry of the national stage of a PCT application as set forth in 37 CFR §1.491, **or**
- before the mailing of the first Office action on the merits; **or**
- before the mailing of the first Office action after the filing of a request for a continued examination under 37 CFR §1.114.

0 **37 CFR §1.97(c)**

- by the applicant after the period specified in 37 CFR §1.97(b), but prior to the

6

mailing date of any of a final action under 37 CFR §1.113, or a notice of allowance under 37 CFR §1.311, or an action that otherwise closes prosecution in the application, and is accompanied by either the fee set forth in 37 CFR §1.17(p) or a statement as specified in 37 CFR §1.97(e), as checked below.

☐ **37 CFR §1.97(d)**

- after the period specified in CFR §1.97(c), and is accompanied by the fee set forth in 37 CFR §1.17(p) and a statement as specified in 37 CFR §1.97(e), as checked below.

(If either of boxes 37 CFR §1.97(c) or 37 CFR §1.97(d) is checked above, the following statement under 37 CFR §1.97(e) may need to be completed.)

- ☐ **37 CFR §1.97(e)** Each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this information disclosure statement.
- ☐ **37 CFR §1.704(d)** Each item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application and the communication was not received by any individual designated in §1.56(c) more than thirty days prior to the filing of this information disclosure statement. Therefore, in accordance with the provisions of 37 CFR §1.704(d), the filing of this information disclosure statement will not be considered a failure to engage in reasonable efforts to conclude prosecution under 37 CFR §1.704.
- ☐ The U.S. Patent and Trademark Office is hereby authorized to charge Deposit Account No. 07-0630 in the amount of \$180.00 to cover the cost of this Information Disclosure Statement under 37 CFR §1.17(p). Any deficiency or overpayment should be charged or credited to this deposit account.

A list of the patent(s) and/or publication(s) is set forth on the attached revised Form PTO-1449. Copies of the items listed on the PTO-1449 form are supplied herewith, except for United States patent(s) and United States patent application publication(s) and other documents that are marked with an asterisk (*) in the attached PTO-1449 form. Copies of United States patents and United States patent application publications will not be supplied unless requested by the Office (37 CFR §1.98(a)(2)(ii)). See Final Rule **1287 OG** (October 12, 2004).

A concise explanation of relevance of the items listed on PTO-1449 is:

- ☒ not given
- ☐ given for each listed item
- ☐ given for only non-English language listed item(s) (Required)
- ☐ in the form of an English language copy of a Search Report from a foreign patent office, issued in a counterpart application, which refers to the relevant portions of the references.

In accordance with 37 CFR §1.97(g), the filing of this information disclosure statement shall not be construed as a representation that a search has been made.

In accordance with 37 CFR §1.97(h), the filing of this information disclosure statement shall not be construed to be an admission that the information cited in the statement is, or is considered to be, material to patentability as defined in 37 CFR § 1.56(b).


The Commissioner is hereby authorized to charge any additional fees required under 37 CFR 1.16 and 1.17 for this Information Disclosure Statement, or credit overpayment to Deposit Account No. 07-0630.

Respectfully submitted,

GENENTECH, INC.

Date: August 4, 2006

By:



Elizabeth M. Barnes, Ph.D., J.D.

Reg. No. 35,059

Telephone No. (650) 225-4563

FORM PTO-1449

U.S. Dept. of Commerce
Patent and Trademark OfficeAtty Docket No.
P5201R1Serial No.
10/583,466LIST OF DISCLOSURES CITED BY APPLICANT
(Use several sheets if necessary)Applicant
Stephen Jay Anderson, et al.Filing Date
15 Jun 2006Group
Not Assigned

U.S. PATENT DOCUMENTS

Examiner Initials		Document Number	Date	Name	Class	Subclass	Filing Date
	1	6,436,707	20.08.02	Zambrowicz, Brian et al.			25.03.99
	2	US2002/0137900A1	26.09.02	Ferrara et al.			14.08.01

OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, etc.)

	3	Abu-Elheiga, L. et al., "Continuous Fatty Acid Oxidation and Reduced Fat Storage in Mice Lacking Acetyl-CoA Carboxylase 2" <u>Science</u> 291:2613-16 (Mar 30, 2001)
	4	Abud, H. E. et al., "The murine A33 antigen is expressed at two distinct sites during development, the ICM of the blastocyst and the intestinal epithelium" <u>Mechanisms of Development</u> 98:111-14 (2000)
	5	Beltowski, J., "Adiponectin and resistin--new hormones of white adipose tissue." <u>Med Sci Monit.</u> 9(2):RA55-61 (Feb 2003)
	6	Bromme, N. C., et al., "Cloning, Characterization, and Expression of the Human TIN-ag-RP Gene Encoding a Novel Putative Extracellular Matrix Protein" <u>Biochemical and Biophysical Research Communications</u> 271:474-80 (2000)
	7	Chang, B., et al., "Identification of a missense mutation in the α A-crystallin gene of the lop18 mouse" <u>Molecular Vision</u> 5:21-5 (1999)
	8	Daly, N.L., et al., "Three-dimensional structure of a cysteine-rich repeat from the low-density lipoprotein receptor" <u>Proc. Natl. Acad. Sci.</u> 92:6334-38 (Jul 1995)
	9	DeLorey, T.M. et al., "Mice lacking the beta3 subunit of the GABAA receptor have the epilepsy phenotype and many of the behavioral characteristics of Angelman syndrome." <u>Neuroscience</u> 18(20):8505-14 (Oct 15, 1998)
	10	Dumoutier et al., "Cloning and Characterization of IL-22 Binding Protein, a Natural Antagonist of IL-10-Related T Cell-Derived Inducible Factor/IL-22" <u>Journal of Immunology</u> 166:7090-7095 (2001)
	11	Eby, M. T., et al., "TAJ, a Novel Member of the Tumor Necrosis Factor Receptor Family, Activates the c-Jun N-Terminal Kinase Pathway and Mediates Caspase-independent Cell Death" <u>The Journal of Biological Chemistry</u> 275(20):15336-42 (May 19, 2000)
	12	Esther, R.C. et al., "Mice Lacking angiotensin-converting enzyme have low blood pressure, renal pathology, and reduced male fertility." <u>Laboratory Investigation</u> 74(5):953-65 (May 1996)
	13	Giese, A., et al., "Molecular characterization of the equine testis-specific protein 1 (TPX1) and acidic epididymal glycoprotein 2 (AEG2) genes encoding members of the cysteine-rich secretory protein (CRISP) family" <u>Gene</u> 299:101-109 (2002)
	14	Giros, B., et al., "Hyperlocomotion and indifference to cocaine and amphetamine in mice lacking the dopamine transporter" <u>Nature</u> 379:606-12 (Feb 15, 1996)
	15	Hara, Y., et al., "LTTPC2Ca ²⁺ -Permeable Channel Activated by Changes in Redox Status Confers Susceptibility to Cell Death" <u>Molecular Cell</u> 9:163-73 (Jan 2002)
	16	Hawes, N.L., et al., "Mouse fundus photography and angiography: A catalogue of normal and mutant phenotypes" <u>Molecular Vision</u> 5:22 (Aug 1999)
	17	Holcomb et al., "FIZZ1, a novel cysteine-rich secreted protein associated with pulmonary inflammation, defines a new gene family" <u>EMBO Journal</u> 19(15):4046-4055 (2000)
	18	Holmes, G., et al., "Expression of slit-2 and slit-3 during chick development." <u>Dev Dyn.</u> 222(2):301-7 (Oct 2001)
	19	Homanics, G. E., et al., "Mice devoid of γ -aminobutyrate type A receptor β 3 subunit have epilepsy, cleft palate, and hypersensitive behavior" <u>Proc. Natl. Acad. Sci. USA</u> 94:4143-8 (Apr 1997)

Examiner

Date Considered

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449		U.S. Dept. of Commerce Patent and Trademark Office		Atty Docket No. P5201R1	Serial No. 10/583,466
LIST OF DISCLOSURES CITED BY APPLICANT (Use several sheets if necessary)				Applicant Stephen Jay Anderson, et al.	
				Filing Date 15 Jun 2006	Group Not Assigned
OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, etc.)					
20	Hu et al., "Characterization of TNFRSF19, a novel member of the tumor necrosis factor receptor superfamily" <u>Genomics</u> 62(1):103-107 (Nov 15, 1999)				
21	Kim, I., et al., "A novel fibroblast growth factor receptor-5 preferentially expressed in the pancreas(1)." <u>Biochim Biophys Acta</u> 1518(1-2):152-6 (Mar 19, 2001)				
22	Kobayashi, M., et al., "Isolation of an androgen-inducible novel lipocalin gene, Arg1, from androgen-dependent mouse mammary Shionogi carcinoma cells." <u>Steroid Biochem Mol Biol</u> 77(2-3):109-15 (May 2001)				
23	Kojima, T., et al., "TROY, a Newly Identified Member of the Tumor Necrosis Factor Receptor Superfamily, Exhibits a Homology with Edar and Is Expressed in Embryonic Skin and Hair Follicles" <u>The Journal of Biological Chemistry</u> 275(27):20742-47 (Jul 7, 2000)				
24	Kotenko et al., "Identification, Cloning, and Characterization of a Novel Soluble Receptor That Binds IL-22 and Neutralizes Its Activity ^{1,2} " <u>J. Immunol.</u> 166:7096-7103 (2001)				
25	Langenbach, R. et al., "Prostaglandin Synthase 1 Gene Disruption in Mice Reduced Arachidonic Acid-Induced Inflammation and Indomethacin-Induced Gastric Ulceration" <u>Cell</u> 83:483-92 (Nov 3, 1995)				
26	Leung, D.W., "The structure and functions of human lysophosphatidic acid acyltransferases." <u>Frontiers in Bioscience</u> 6:D944-53 (Aug 2001)				
27	Li, L., et al., "Identification of a Human Follicular Dendritic Cell Molecule That Stimulates Germinal Center B Cell Growth" <u>Journal of Experimental Medicine</u> 191(6):1077-83 (Mar 20, 2000)				
28	Little, M. H., et al., "Dual trafficking of Slit3 to mitochondria and cell surface demonstrates novel localization for Slit protein" <u>Am J Physiol Cell Physiol</u> 281:C486-95 (2001)				
29	Liu, M., et al., "GPR56, a Novel Secretin-like Human G-Protein-Coupled Receptor Gene" <u>Genomics</u> 55:296-305 (1999)				
30	Louie and Edwards, "Hypertrophic Cardiomyopathy" <u>Prog. Cardiovasc. Dis.</u> 36:275-308 (1994)				
31	Milne, T. J., et al., "Isolation and Characterization of a Cone Snail Protease with Homology to CRISP Proteins of the Pathogenesis-related Protein Superfamily" <u>Journal of Biological Chemistry</u> 278(33):31105-10 (Aug 15, 2003)				
32	Mukai, K., et al., "An Inverse Correlation between Expression of a Preprocathepsin B-related Protein with Cysteine-rich Sequences and Steroid 11 β -Hydroxylase in Adrenocortical Cells" <u>The Journal of Biological Chemistry</u> 278(19):17084-92 (May 9, 2003)				
33	Perraud, A., et al., "ADP-ribose gating of the calcium-permeable LTRPC2 channel revealed by Nudix motif homology" <u>Nature</u> 411:595-9 (May 2001)				
34	Pizzuti, A., et al., "An ATG Repeat in the 3'-Untranslated Region of the Human Resistin Gene Is Associated with a Decreased Risk of Insulin Resistance" <u>Journal of Clinical Endocrinology & Metabolism</u> 87(9):4403-6 (2002)				
35	Sano, Y., et al., "Immunocyte Ca ²⁺ Influx System Mediated by LTRPC2" <u>Science</u> 293:1327-30 (Aug 17, 2001)				
36	Schultz, J., et al., "SMART: a web-based tool for the study of genetically mobile domains" <u>Nucleic Acids Research</u> 28(1):231-4 (2000)				
37	Sleeman, M., et al., "Identification of a new fibroblast growth factor receptor, FGFR5" <u>Gene</u> 271:171-82 (2001)				
38	Spirito et al., "The Management of Hypertrophic Cardiomyopathy" <u>New England J. of Medicine</u> 336:775-785 (1997)				
39	Steppan, C. M., et al., "The hormone resistin links obesity to diabetes" <u>Nature</u> 409:307-12 (Jan 2001)				
Examiner				Date Considered	
*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.					

FORM PTO-1449		U.S. Dept. of Commerce Patent and Trademark Office		Atty Docket No. P5201R1	Serial No. 10/583,466
LIST OF DISCLOSURES CITED BY APPLICANT (Use several sheets if necessary)				Applicant Stephen Jay Anderson, et al.	
				Filing Date 15 Jun 2006	Group Not Assigned
OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, etc.)					
40	Sutphen, R. et al., "Lysophospholipids Are Potential Biomarkers of Ovarian Cancer" <u>Cancer Epidemiology Biomarkers & Prevention</u> 13(7):1185-91 (Jul 2004)				
41	Vassilatis, D. K., et al., "The G protein-coupled receptor repertoires of human and mouse" <u>Proc. Natl. Acad. Sci. USA</u> 100(8):4903-8 (Apr 15, 2003)				
42	Wehage, E., et al., "Activation of the Cation Channel Long Transient Receptor Potential Channel 2 (LTRPC2) by Hydrogen Peroxide" <u>The Journal of Biological Chemistry</u> 277(26):23150-6 (Jun 28, 2002)				
43	Wex, T., et al., "TIN-ag-RP, a Novel Catalytically Inactive Cathepsin B-Related Protein with EGF Domains, Is Predominantly Expressed in Vascular Smooth Muscle Cells" <u>Biochemistry</u> 40:1350-7 (2001)				
44	Wiedemann, M., et al., "Characterization of a Novel Protein (FGFRL1) from Human Cartilage Related to FGF Receptors" <u>Genomics</u> 69:275-9 (2000)				
45	Wiedemann, M., et al., "The mouse Fgfr1l gene coding for a novel FGF receptor-like protein." <u>Biochim Biophys Acta</u> 1520(3):247-50 (Sep 21, 2001)				
46	Wigle et al., "Hypertrophic cardiomyopathy, clinical spectrum and treatment" <u>Circulation</u> 92:1680-1692 (1995)				
47	Wu, H. et al., "Generation of Committed Erythroid BFU-E and CFU-E Progenitors Does Not Require Erythropoietin or the Erythropoietin Receptor" <u>Cell</u> 83:59-67 (Oct 6, 1995)				
48	Xu et al., "A soluble class II cytokine receptor, IL-22RA2, is a naturally occurring IL-22 antagonist" <u>Proc. Natl. Acad. Sci. USA</u> 98:9511-9516 (Aug 14, 2001)				
49	Xu, X, et al., "Presence of a vertebrate fibrinogen-like sequence in an echinoderm" <u>Proc. Natl. Acad. Sci. USA</u> 87:2097-2101 (Mar 1990)				
50	Zendman, A., et al., "TM7XN1, a novel human EGF-TM7-like cDNA, detected with mRNA differential display using human melanoma cell lines with different metastatic potential" <u>FEBS Letters</u> 446:292-8 (1999)				
51	Zhang, Q., et al., "Cloning and Functional Analysis of cDNAs with Open Reading Frames for 300 Previously Undefined Genes Expressed in CD34+ Hematopoietic Stem/Progenitor Cells" <u>Genome Research</u> 10:1546-60 (2000)				
Examiner			Date Considered		
*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.					